Claims

1. A harvesting machine with a supply device that can be operated in such a manner as to feed crop to a crop processing device and with a control that is designed, based on the detected rotational speed of one of the crop processing device or the supply device, to generate a controller output signal that brings about a change in the detected rotational speed such that the difference between the actual rotational speed ratio of the supply device and crop processing device and the desired rotational speed ratio is at least reduced, characterized in that the control can be operated in such a manner as to generate the controller output signal independently of a detection of the rotational speed of the supply device or of the crop processing device.

2. The harvesting machine, as defined in claim 1, wherein said control can be operated in such a manner as to determine said controller output signal for the supply device or the crop processing device using the detected rotational speed of the crop processing device or of the supply device and the desired value of the ratio between the rotational speed of the supply device and the rotational speed of the crop processing device.

3. The harvesting machine, as defined by claim 2, wherein said control can be operated in such a manner as to determine the controller output signal with a table and/or an algorithm.

4. The harvesting machine, as defined in claim 1, wherein said supply device includes a hydrostatic drive motor, a pump coupled for supplying fluid to said drive motor; and wherein said control can be operated in such a manner as to determine a controller output signal for the supply device or the crop processing device based on a measured rotational speed at which said pump is driven that supplies said hydrostatic drive motor of the supply device with hydraulic fluid standing under pressure.

5. The harvesting machine, as defined in claim 4, wherein said characterized in that the drive motor drives the supply device by one of directly, via a fixed or shiftable gear transmission, via a planetary transmission comprising an

element driven mechanically by an internal combustion engine.

6. The harvesting machine, as defined in claim 4, and further including an internal combustion engine; said engine being coupled for driving said pump; a rotational speed sensor being located for detecting the speed of rotation of said engine, and in this way detects the speed at which said pump is driven.

7. The harvesting machine, as defined in claim 1, and further including a rotational speed sensor that is situated for directly detecting the rotational speed of one of said crop processing device or said supply device.

8. The harvesting machine, as defined in claim 1, and further including a rotational element in driving connection with one of said crop processing device and said supply device; and a rotational speed sensor being situated for indirectly detecting the rotational speed of one of said crop processing device or of said supply device by detecting the rotational speed of said element in driving connection with one of said crop processing device or said supply device.

9. A harvesting machine, as defined in claim 1, wherein said control is connected to at least two speed sensors designed to detect the rotational speed of the supply device and/or of the crop processing device; and said control being operable for detecting and storing the rotational speed ratio of the two sensors in order to be able, if one of the sensors fails, to fall back on the remaining sensor.

10. The harvesting machine, as defined in claim 1, wherein said crop processing device is a chopper drum; said supply device comprises draw-in rollers; and said control being operable for adjusting the rotational speed of the draw-in rollers in such a manner that a desired value for the cut length is achieved.